

An EPA Assessment of Atmospheric Water Generation

Project Plan Outline

July 10, 2017

Overarching Goals

- 1) Collaborate with our DOD partners to assess the state of the technology
- 2) Work with interested commercial vendors to evaluate their technology with a focus on microbiological y
- 3) Leverage existing EPA expertise related to
 - a) opportunistic pathogens in drinking water systems (Legionella, Mycobacteria) and
 - b) water reuse in urban environments (specifically, AC condensate recovery)
- 4) Think broadly about the system level impacts of the application of this technology in real world applications

Initial phase:

- 1) Summarize the state of the technology (obtaining existing reports from TARDEC and summarize major findings on AWG systems (include in Fridays write up) (Nye and Impelleri)
- 2) Reach out to the commercial vendors of the technology to collaborate on assessment focused on microbiological water quality (Background/rationale for the work, Jay
Interface with Scalise/Bauer on the request for vendors

Phase II

- 1) Testing of commercial technologies, with a focus on research gap consistent with EPA ORD skills (environmental pathogens) (This would be in the form of the SOW provided by Scalise/Bauer)
(Jahne & Nye?)

Phase III

- 1) Developing the technology
 - a) Collaborate with TARDEC to evaluate new pressure assisted design from Rocky Research (Nye)
 - b) Conduct scenario analyses to evaluate the cost/benefit of the AWG vs other approaches for different applications defined by the group (life cycle costing, impacts of different scenarios) Cissy with Jeff Lape)
 - c) Define current limits of technology for specific applications of interest
Prioritize technology areas for future development with key partners, including TARDEC (Impelleri & Nye)